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Groundwater Quality Protection Program

W.A. Howe MHC
FACILITY NUMBER 0317850
WELL SITE SURVEY REPORT

Division of Public Water Supplies

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GROUNDWATER QUALITY PROTECTION PROGRAM:

W.A. Howe MHC
FACILITY NUMBER 0317850
WELL SITE SURVEY REPORT

Presented by:

Division of Public Water Supplies

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Springfield, Illinois

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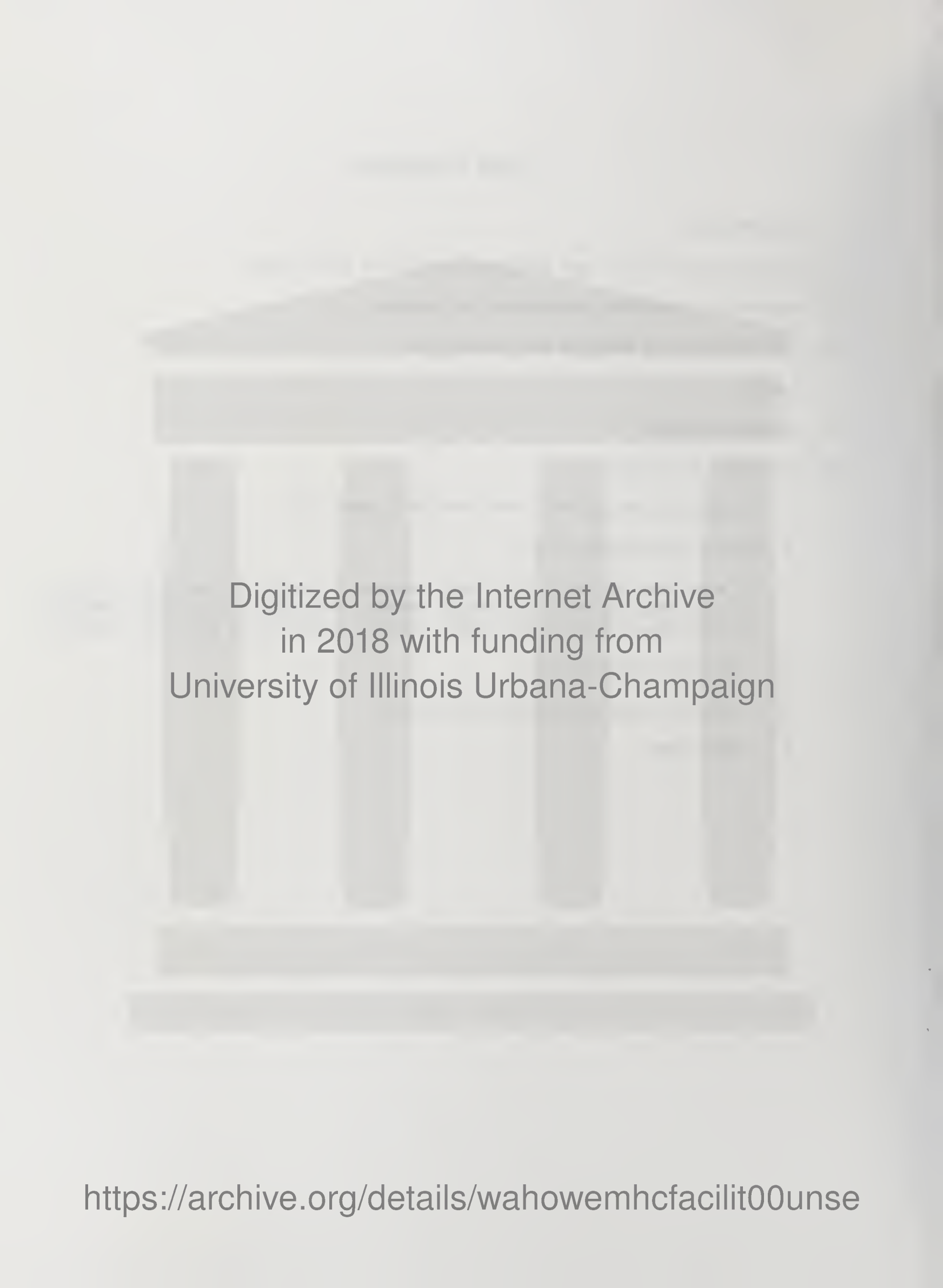
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INTRODUCTION

This report has been prepared by the Illinois Environmental Protection Agency (Agency) pursuant to Section 17.1 of the Illinois Environmental Protection Act (Act). The report summarizes information about your facility and samples collected and analyzed from your well(s). The well site survey provides an inventory of the area around the well(s) to help increase your awareness of potential hazards to the groundwater utilized by your facility. This information and technical data will assist you in developing and implementing local groundwater protection measures authorized by the Act.

FACILITY DESCRIPTION AND GEOLOGIC PROFILE OF WELL SITES

W.A. Howe MHC has three public water supply wells. The facility produces 253,000 gallons per day to an estimated population of 1,025. See Table I for a description of each well. The wells utilize a shallow bedrock aquifer overlain by uniform, relatively impermeable silty or clayey till at least 50 feet thick. Permeability is the ability of a soil or sediment to transmit fluids. A detailed description and geologic profile is found in the Facility wells Report (Appendix C).

TABLE 1

Well I.D.	Setback Min. (Ft.)	Setback Max. (Ft.)	Status	Capacity (gpm) (MGD)	Specific Capacity (gpm/ft)	Treatment	Aquifer	Well Depth (Ft.)	Well Logs Avail.
Well #1 (20641)	200		A	439.9 0.634	NA	Cl,Fl	Shallow Bedrock	491	Yes
Well #2 (20642)	200		A	1096 1.580	NA	Cl,Fl	Shallow Bedrock	489	Yes
Well #3 (20643)	200		A	549.6 0.792	NA	Cl,Fl	Shallow Bedrock	515	Yes

A=Active; I=Inactive; SB=Standby

GROUNDWATER SAMPLING/MONITORING HISTORY

The public water supply wells no. 1, and no. 2 were sampled as part of the Statewide Groundwater Monitoring Network on October 13, 1987 and November 20, 1985 respectively. The samples were analyzed for volatile organic and aromatic chemicals (VOC/VOA) and inorganic chemcials (IOC). The VOC/VOA analyses performed detected no quantifiable levels of organic chemicals in the wells. The IOC analyses performed found the water from well no. 1 to have and elevated level of iron, which is not uncommon for similar wells in the area, and the analyses performed found the water from well no.2 to meet all general use guidelines. Well no. 3 was not sampled as part of the Statewide Groundwater Monitoring Network.

SURVEY METHODS AND PROCEDURES

The detailed well site survey consists of an aerial photographic map and inventory sheets (Appendix B), that relate information about potential sources, routes and possible problem sites to your water supply well(s). The location of potential sources, routes, possible problem sites, water supply wells, minimum setback zones, and 1,000 foot survey area are all displayed on the aerial photographic map.

The first page of each survey consists of a summary description and geologic profile for each well. The second and following pages of the survey inventory units within and bordering a 1,500 foot radius of the wellhead. A unit is defined as any device, mechanism, equipment, or area (exclusive of land utilized for agricultural production). The Agency five-digit well number is associated with a unit or map code, and then classified. The classification codes relate to definitions of potential contamination sources and routes as defined in the Illinois Groundwater Protection Act (see Groundwater Primer pages 18-19). The distance and direction of the unit from the wellhead is also indicated.

Survey Results and Findings:

The well site survey of W.A. Howe MHC was conducted on May 6, 1992 by Greg White, Environmental Protection Specialist from the Agency's Rockford Regional Office. The following describes the results and findings for W.A. Howe MHC.

W.A. Howe MHC Well #1 (20641)

The survey area is urban consisting partly of moderate density residential housing and partly of commercial/industrial businesses. The well is located off 183rd Street just west of Harlem Ave. There are no visible potential sources, routes, or possible problem sites within the minimum setback zone (200 feet). Twenty-five potential source or possible problem site is located outside the minimum setback zone but within the survey area of the well (1500 feet). These sites are W. A. Howe MHC-Steam Plant (map code 1) located 300 feet west of the well, W. A. Howe-Water Treatment Plant (map code 2) located 300 feet northwest of the well, Apartments (map code 3) located 300 feet east of the well, Brusky Products (map code 4) located 500 feet north of the well, Airys Inc. (map code 5) located 650 feet north of the well, an Empty Building (map code 6) located 650 feet northwest of the well, WLI Werneke-Long Inc. (map code 7) located 925 feet north of the well, Adco Services Inc. (map code 8) located 1050 feet northwest of the well, Peoria Mfg. Inc. (map code 9) located 1200 feet northwest of the well, Tinley Auto Repair (map code 10) located 1350 northwest of the well, Vehicle Wash Systems (map code 11) located 1425 feet northwest of the well, Premium Services Inc. (map code 12) located 1400 feet north of the well, Southwest Community Services Inc. (map code 13) located 700 feet northeast of the well,

Heritage Tool Mfg. Inc. (map code 14) located 1000 feet northeast of the well, Robert Environmental Control (map code 15) located 1050 feet northeast of the well, Tumbling Gym/Flooring Company (map code 16) located 1125 feet northeast of the well, Garfield Ridge Trust & Savings Bank (map code 17) located 1050 feet northeast of the well, H.B. Fuller Co. (map code 18) located 1350 feet northeast of the well, Anderson Heating Co. (map code 19) located 1425 feet northwest of the well, Labelblank Corp. (map code 20) located 1450 feet northwest of the well, Eur-Am Auto and RV Rebuilders (map code 21) located 1200 feet northwest of the well, Pico Chemical Corp. (map code 22) located 1225 feet northwest of the well, unknown company (map code 23) located 1325 feet northwest of the well, Service Master (map code 24) located 1425 feet northwest of the well, and Herman's Auto Service (map code 25) located 1500 feet northwest of the well.

W.A.Howe MHC Well #2 (20642)

The survey area is urban consisting partly of moderate density residential housing and partly of commercial/industrial businesses. The well is located west of Harlem Ave. There are no visible potential sources, routes, or possible problem sites within the minimum setback zone (200 feet). Sixteen potential source or possible problem site is located outside the minimum setback zone but within the survey area of the well (1500 feet). These sites are Apartments (map code 3) located 1300 feet southwest of the well, Southwest Community Services Inc. (map code 13) located 1350 feet west of the well, Robert Environmental Control (map code 15) located 1450 feet northwest of the well, Tumbling ON USA/DS Contact Flooring (map code 16) located 1350 feet northwest of the well, Garfield Ridge Trust & Savings Bank (map code 17) located 1300 feet northwest of the well, H.B. Fuller (map code 18) located 1000 feet northwest of the well, Anderson Heating Co. (map code 19) located 1150 northwest of the well, Labelblank Corp. (map code 20) located 1000 feet northwest of the well, Eur-Am Auto and RV Rebuilders (map code 21) located 1000 feet northwest of the well, Pico Chemical Corp. (map code 22) located 950 feet northwest of the well, an unknown building (map code 23) located 850 feet northwest of the well, Service Master (map code 24) located 775 feet northwest of the well, Herman's Auto Service (map code 25) located 700 feet northwest of the well, The Healthy Attitude Ltd. (map code 26) located 1000 feet northwest of the well, Chris Kane Inc./MAACO/Frame Tech/Hand Car Wash (map code 27) located 525 feet northwest of the well, and Mr. G's Furniture (map code 28) located 875 feet north of the well.

W.A.Howe MHC Well #3 (20643)

The survey area is urban consisting partly of moderate density residential housing and partly of commerical/industrial businesses. The well is located west of Harlem Ave. There are no visible potential sources, routes, or possible problem sites within the survey (200 feet). Sixteen potential source or possible problem site is located outside the minimum setback zone but within the survey area of the well (1500 feet). These sites are Apartments (map code 3) located 1275 feet southwest of the well, Southwest Community Services Inc. (map code 13) located 1350 feet west of the well, Robert Environmental Control (map code 15) located 1400 feet northwest of the well, Tumbling ON USA/DS Contact Flooring (map code 16) located 1325 feet northwest of the well, Garfield Ridge Trust & Savings Bank (map code 17) located 1250 feet northwest of the well, H.B. Fuller (map code 18) located 1000 feet northwest of the well, Anderson Heating Co. (map code 19) located 1100 northwest of the well, Labelblank Corp. (map code 20) located 900 feet northwest of the well, Eur-Am Auto and RV Rebuilders (map code 21) located 850 feet northwest of the well, Pico Chemical Corp. (map code 22) located 900 feet northwest of the well, an unknown building (map code 23) located 800 feet northwest of the well, Service Master (map code 24) located 700 feet northwest of the well, Herman's Auto Service (map code 25) located 600 feet northwest of the well, The Healthy Attitude Ltd. (map code 26) located 800 feet northwest of the well, Chris Kane Inc./MAACO/Frame Tech/Hand Car Wash (map code 27) located 350 feet northwest of the well, and Mr. G's Furniture (map code 28) located 575 feet north of the well.

SUMMARY

The well site survey conducted located no potential sources, routes, or possible problem sites within the minimum setback zone, but several potential source or possible problem site outside the minimum setback zone but within the survey area of Wells nos. 1, 2 and 3. The sampling and monitoring to date has detected no contamination in the groundwater utilized by the facility.

The Illinois Environmental Protection Act provides minimum protection zones for your wells. These minimum protection zones are regulated by the Agency. The Act also authorizes county and municipal officials the opportunity to provide maximum protection zones up to 1,000 feet. The responsibility for the control would then be assumed by the local officials through adoption of a maximum setback zone ordinance. Cook County officials should be contacted in order to make application.

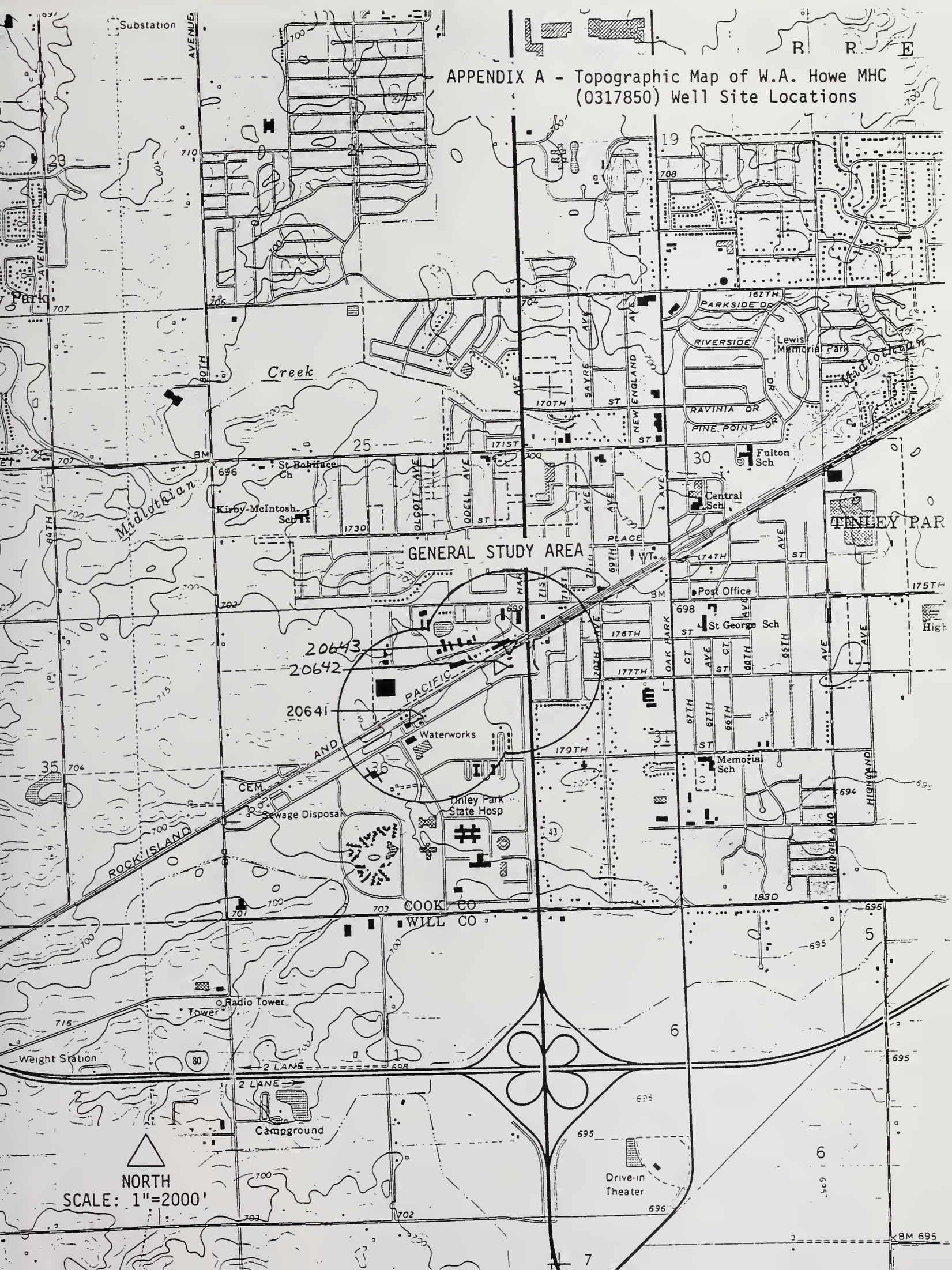
Maximum setback zones prohibit the siting of new potential primary sources of groundwater contamination. A maximum setback up to 1,000 feet could expand the regulatory coverage of certain existing and new activities. These controls could be implemented upon the adoption of proposed regulations by the Illinois Pollution Control Board.

RECOMMENDATIONS

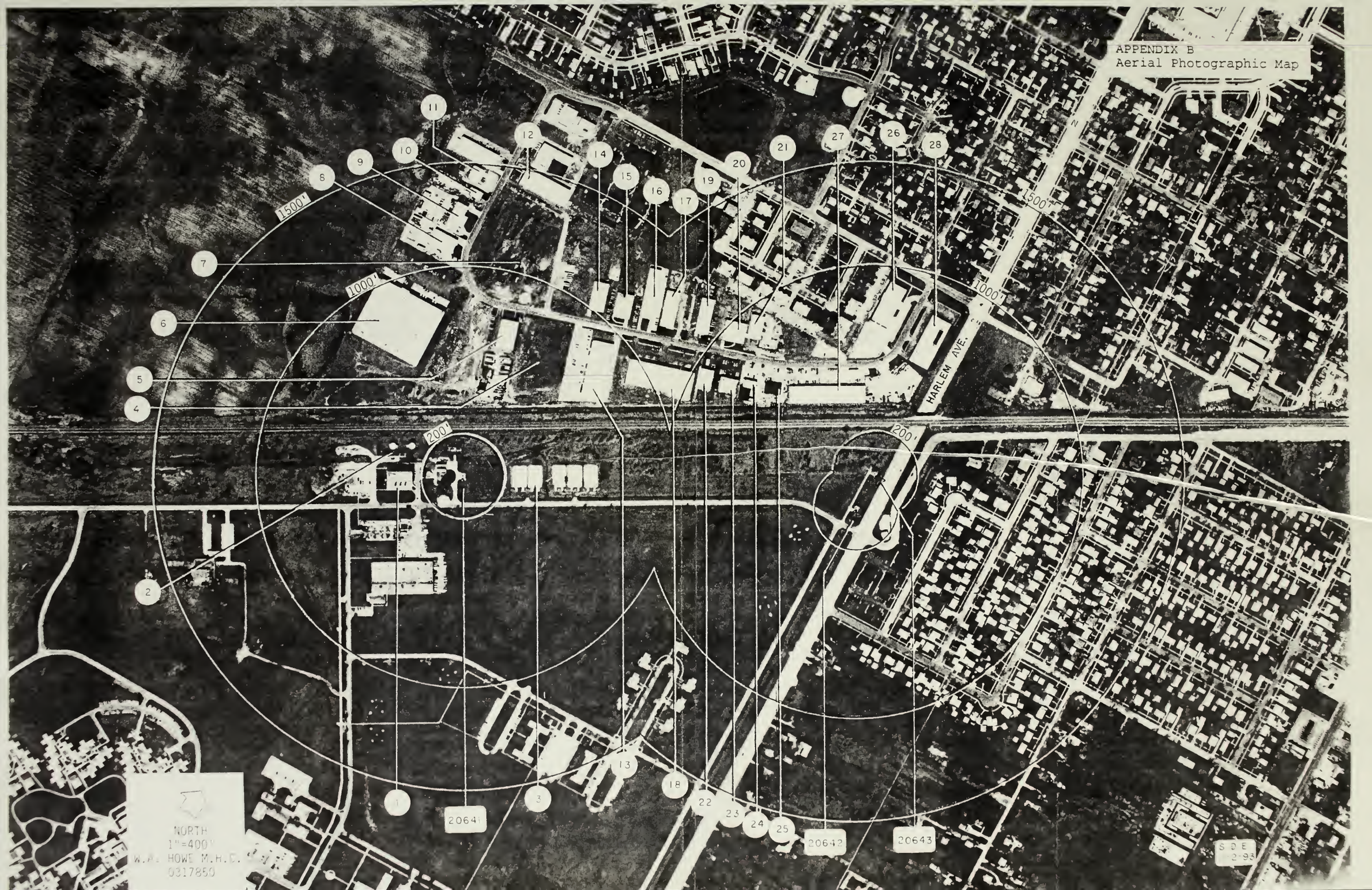
The Agency strongly urges W.A. Howe MHC to consider establishing a maximum setback zone ordinance for its wells. Maximum setback zones prohibit the siting of new potential primary sources of groundwater contamination up to 1000 feet from respective wellheads. Regulatory coverage of certain existing activities could be expanded upon adoption of proposed regulations currently before the Illinois Pollution Control Board. To aid you in the development of further regulatory coverage for your well supply, the Agency prepared a "Maximum Setback Zone Workbook" that provides detailed case studies of how to establish maximum setback zones. This text and further technical assistance is readily available form the Agency and the Illinois State Water Survey.

Local governments are also encouraged to consider conducting groundwater protection needs assessments. Any county or municipality having a population less than 25,000 or 5,000 persons respectively, may request the Agency to conduct a hazard review in lieu of a need's assessment. The Agency may issue an "advisory of groundwater contamination hazard" if a significant hazard to the public health or the environment exists.

TECHNICAL APPENDICES


APPENDIX A - Topographic Map of W.A. Howe MHC (0317850) Well Site Locations
GENERAL STUDY AREA
20643
20642
20641
Substation
Creek
Midlothian
St Boniface Ch
Kirby-McIntosh Sch
Waterworks
Sewage Disposal
Tinley Park State Hosp
Fulton Sch
Central Sch
Post Office
St George Sch
Memorial Sch
Lewis Memorial Park
Radio Tower
Weight Station
Campground
Drive-in Theater
ROCK ISLAND
PACIFIC
COOK CO
WILL CO
NORTH
SCALE: 1"=2000'

APPENDIX B
Aerial Photographic Map


APPENDIX B
Aerial Photographic Map
1500'
1000'
200'
HARLEM AVE.
20641
20642
20643
NORTH
1"=400'
W.A. HOWE M.H.D.
0317850
S D E
2-93

Appendix B1 - WELL SITE SUMMARY DESCRIPTION AND GEOLOGIC PROFILE
W.A. Howe MHC Well No. 1 (IEPA #20641)

SURVEYOR: White
SURVEY DATE: 05-06-92
ADDRESS: Harry Kats
7400 W. 183rd Street
Tinley Park, IL 60477

AGENCY WELL NO: 20641
WELL NAME & DESC: Well #1
TREATMENT APPLICATION POINT: 01
FACILITY NO. & NAME: 0317850 - W.A. Howe MHC
FACILITY PHONE CONTACT: 708-532-7000

LOCATION: TWP, RNG, SECTION, 10 ACRE PLOT: 36N, 12E, 36, 3F
DISTANCE FROM CORNER: 1900S, 1850W
QUAD SHEET CODE & NAME: 054D - Tinley Park
MIN. SETBACK: 200 feet
MAX. SETBACK:

SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: E- Uniform, relatively impermeable silty or clayey till at least 50 feet thick; no evidence of interbedded sand and gravel.
AGE OF WELL: 1952
WELL DEPTH: 491 feet
CASING DEPTH: 112 feet
AQUIFER CODE: 5656 - Shallow Bedrock
MULTPLE AQUIFER (Y,N): No
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is urban consisting of partly of moderate density residential housing and partly of commerical/industrial businesses.

INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO:

APPENDIX B1 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 1 (IEPA #20641)

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 20641-01
NAME & ADDRESS OF UNIT OWNER: W.A. Howe MHC, 7400 W. 183rd Street, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Steam Plant
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 300 feet west of the well

WELL NO. - MAP CODE - CLASSF*: 20641-02
NAME & ADDRESS OF UNIT OWNER: W.A. Howe MHC, 7400 W. 183rd Street, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Water Treatment Plant
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 300 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20641-03
NAME & ADDRESS OF UNIT OWNER: Apartments, W. 183rd Street, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Apartment Complex
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 300 feet east of the well

WELL NO. - MAP CODE - CLASSF*: 20641-04
NAME & ADDRESS OF UNIT OWNER: Brusky Products, 7447 Duvan Dr., Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Brushes, Brooms, and Mops
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 500 feet north of the well

WELL NO. - MAP CODE - CLASSF*: 20641-05
NAME & ADDRESS OF UNIT OWNER: Airys Inc., Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Contractors
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 650 feet north of the well

APPENDIX B1 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 1 (IEPA #20641)

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RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 20641-06
NAME & ADDRESS OF UNIT OWNER: Empty Building, Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 650 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20641-07
NAME & ADDRESS OF UNIT OWNER: WLI Werneke-Long Inc., 7450 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Printing Ink
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 950 feet north of the well

WELL NO. - MAP CODE - CLASSF*: 20641-08
NAME & ADDRESS OF UNIT OWNER: Adco Services Inc., 17650 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1050 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20641-09
NAME & ADDRESS OF UNIT OWNER: Peoria Mfg. Inc., 17620 Duven Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: General Machining Job Shop
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1200 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20641-10
NAME & ADDRESS OF UNIT OWNER: Tinley Auto Repair, 17600 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Auto Repair
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1350 feet northwest of the well

APPENDIX B1 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 1 (IEPA #20641)

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WELL NO. - MAP CODE - CLASSF*: 20641-11
NAME & ADDRESS OF UNIT OWNER: Vehicle Wash Systems, Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Car Wash Parts Manufacturing
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1425 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20641-12
NAME & ADDRESS OF UNIT OWNER: Premium Services Inc., 17549 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1400 feet north of the well

WELL NO. - MAP CODE - CLASSF*: 20641-13
NAME & ADDRESS OF UNIT OWNER: Southwest Community Services Inc., 7413 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Assembly, Packaging, and Material Collation
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 700 feet northeast of the well

WELL NO. - MAP CODE - CLASSF*: 20641-14
NAME & ADDRESS OF UNIT OWNER: Heritage Tool Mfg. Inc., 7420 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Machine Tools and CNC Machining
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1000 feet northeast of the well

WELL NO. - MAP CODE - CLASSF*: 20641-15
NAME & ADDRESS OF UNIT OWNER: Robert Environmental Control, 7410 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1050 feet northeast of the well

APPENDIX B1 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 1 (IEPA #20641)

*CLASSF KEY

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WELL NO. - MAP CODE - CLASSF*: 20641-16
NAME & ADDRESS OF UNIT OWNER: Tumbling ON USA/DS Contact Flooring, 7400 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Tumbling Gym/Flooring Company
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1125 feet northeast of the well

WELL NO. - MAP CODE - CLASSF*: 20641-17-OS
NAME & ADDRESS OF UNIT OWNER: Garfield Ridge Trust & Savings Bank, 7400 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Bank, 2 registered underground storage tanks on site OFSM #2-014893.
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1050 feet northeast of the well

WELL NO. - MAP CODE - CLASSF*: 20641-18
NAME & ADDRESS OF UNIT OWNER: H.B. Fuller Co., 7351 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1350 feet northeast of the well

WELL NO. - MAP CODE - CLASSF*: 20641-19
NAME & ADDRESS OF UNIT OWNER: Anderson Heating Co., 7330 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Heating and Cooling Company
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1425 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20641-20
NAME & ADDRESS OF UNIT OWNER: Labelblank Corp., 7320 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Pressure Sensitive Labels and Diecast Label Forms.
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1450 feet northwest of the well

APPENDIX B1 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 1 (IEPA #20641)

*CLASSF KEY

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PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 20641-21
NAME & ADDRESS OF UNIT OWNER: Eur-Am Auto and RV Rebuilders, 7300 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Auto and RV Rebuilder
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1200 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20641-22
NAME & ADDRESS OF UNIT OWNER: Pico Chemical Corp., 7319 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Industrial Metalworking Chemicals
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1225 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20641-23
NAME & ADDRESS OF UNIT OWNER: unknown, Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1325 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20641-24
NAME & ADDRESS OF UNIT OWNER: Service Master, Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Commerical Cleaning Products
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1425 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20641-25
NAME & ADDRESS OF UNIT OWNER: Herman's Auto Service, 7305 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Auto Repair
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1500 feet northeast of the well

APPENDIX B1 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 1 (IEPA #20641)

*CLASSF KEY

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RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 20641-26
NAME & ADDRESS OF UNIT OWNER: The Healthy Attitude Ltd., 17500 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Health Club
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2150 feet northeast of the well

WELL NO. - MAP CODE - CLASSF*: 20641-27
NAME & ADDRESS OF UNIT OWNER: Chris Kane/MAACO/Frame Tech/Hand Car Wash, 7233 Duvan Drive, Tinely Park, IL 60477
DESCRIPTION AND COMMENTS: Auto Repair/Frame Shop/Car Wash.
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1650 feet northeast of the well

WELL NO. - MAP CODE - CLASSF*: 20641-28
NAME & ADDRESS OF UNIT OWNER: Mr. G's Furnityre, 17500 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Furniture Store
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2275 feet northeast of the well

APPENDIX B2 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 2 (IEPA #20642)

SURVEYOR: White
SURVEY DATE: 05-06-92
ADDRESS: Harry Kats
7400 W. 183rd Street
Tinley Park, IL 60477

AGENCY WELL NO: 20642
WELL NAME & DESC: Well #2
TREATMENT APPLICATION POINT: 01
FACILITY NO. & NAME: 0317850 - W.A. Howe MHC
FACILITY PHONE CONTACT: 708-532-7000

LOCATION: TWP, RNG, SECTION, 10 ACRE PLOT: 36N, 12E, 36, 1G
DISTANCE FROM CORNER: 1050S, 100W
QUAD SHEET CODE & NAME: 054D - Tinley Park
MIN. SETBACK: 200 feet
MAX. SETBACK:

SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: E- Uniform, relatively impermeable silty or clayey till at least 50 feet thick; no evidence of interbedded sand and gravel.
AGE OF WELL: 1951
WELL DEPTH: 489 feet
CASING DEPTH: 130 feet
AQUIFER CODE: 5656 - Shallow Bedrock
MULTPLE AQUIFER (Y,N): No
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is urban consisting of partly of moderate density residential housing and partly of commerical/industrial businesses.

INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO:

APPENDIX B2 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 2 (IEPA #20642)

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 20642-01
NAME & ADDRESS OF UNIT OWNER: W.A. Howe MHC, 7400 W. 183rd Street, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Steam Plant
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2150 feet southwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-02
NAME & ADDRESS OF UNIT OWNER: W.A. Howe MHC, 7400 W. 183rd Street, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Water Treatment Plant
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2150 feet southwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-03
NAME & ADDRESS OF UNIT OWNER: Apartments, W. 183rd Street, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Apartment Complex
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1300 feet southeast of the well

WELL NO. - MAP CODE - CLASSF*: 20642-04
NAME & ADDRESS OF UNIT OWNER: Brusky Products, 7447 Duvan Dr., Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Brushes, Brooms, and Mops
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1600 feet west of the well

WELL NO. - MAP CODE - CLASSF*: 20642-05
NAME & ADDRESS OF UNIT OWNER: Airys Inc., Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Contractors
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1850 feet west of the well

APPENDIX B2 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 2 (IEPA #20642)

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 20642-06
NAME & ADDRESS OF UNIT OWNER: Empty Building, Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2200 feet west of the well

WELL NO. - MAP CODE - CLASSF*: 20642-07
NAME & ADDRESS OF UNIT OWNER: WLI Werneke-Long Inc., 7450 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Printing Ink
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1900 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-08
NAME & ADDRESS OF UNIT OWNER: Adco Services Inc., 17650 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2300 feet west of the well

WELL NO. - MAP CODE - CLASSF*: 20642-09
NAME & ADDRESS OF UNIT OWNER: Peoria Mfg. Inc., 17620 Duven Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: General Machining Job Shop
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2350 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-10
NAME & ADDRESS OF UNIT OWNER: Tinley Auto Repair, 17600 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Auto Repair
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2350 feet northwest of the well

APPENDIX B2 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 2 (IEPA #20642)

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 20642-11
NAME & ADDRESS OF UNIT OWNER: Vehicle Wash Systems, Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Car Wash Parts Manufacturing
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2400 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-12
NAME & ADDRESS OF UNIT OWNER: Premium Services Inc., 17549 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2050 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-13
NAME & ADDRESS OF UNIT OWNER: Southwest Community Services Inc., 7413 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Assembly, Packaging, and Material Collation
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1350 feet west of the well

WELL NO. - MAP CODE - CLASSF*: 20642-14
NAME & ADDRESS OF UNIT OWNER: Heritage Tool Mfg. Inc., 7420 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Machine Tools and CNC Machining
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1600 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-15
NAME & ADDRESS OF UNIT OWNER: Robert Environmental Control, 7410 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1450 feet northwest of the well

APPENDIX B2 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 2 (IEPA #20642)

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 20642-16
NAME & ADDRESS OF UNIT OWNER: Tumbling ON USA/DS Contact Flooring, 7400 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Tumbling Gym/Flooring Company
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1350 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-17-OS
NAME & ADDRESS OF UNIT OWNER: Garfield Ridge Trust & Savings Bank, 7400 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Bank, 2 registered underground storage tanks on site OFSM #2-014893.
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1300 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-18
NAME & ADDRESS OF UNIT OWNER: H.B. Fuller Co., 7351 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1000 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-19
NAME & ADDRESS OF UNIT OWNER: Anderson Heating Co., 7330 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Heating and Cooling Company
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1150 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-20
NAME & ADDRESS OF UNIT OWNER: Labelblank Corp., 7320 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Pressure Sensitive Labels and Diecast Label Forms.
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1000 feet northwest of the well

APPENDIX B2 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 2 (IEPA #20642)

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 20642-21
NAME & ADDRESS OF UNIT OWNER: Eur-Am Auto and RV Rebuilders, 7300 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Auto and RV Rebuilder
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1000 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-22
NAME & ADDRESS OF UNIT OWNER: Pico Chemical Corp., 7319 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Industrial Metalworking Chemicals
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 950 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-23
NAME & ADDRESS OF UNIT OWNER: unknown, Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 850 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-24
NAME & ADDRESS OF UNIT OWNER: Service Master, Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Commerical Cleaning Products
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 775 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-25
NAME & ADDRESS OF UNIT OWNER: Herman's Auto Service, 7305 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Auto Repair
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 700 feet northwest of the well

APPENDIX B2 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 2 (IEPA #20642)

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 20642-26
NAME & ADDRESS OF UNIT OWNER: The Healthy Attitude Ltd., 17500 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Health Club
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1000 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-27
NAME & ADDRESS OF UNIT OWNER: Chris Kane/MAACO/Frame Tech/Hand Car Wash, 7233 Duvan Drive, Tinely Park, IL 60477
DESCRIPTION AND COMMENTS: Auto Repair/Frame Shop/Car Wash.
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 525 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20642-28
NAME & ADDRESS OF UNIT OWNER: Mr. G's Furnityre, 17500 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Furniture Store
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 875 feet north of the well

Appendix B3 - WELL SITE SUMMARY DESCRIPTION AND GEOLOGIC PROFILE
W.A. Howe MHC Well No. 3 (IEPA #20643)

SURVEYOR: White
SURVEY DATE: 05-06-92
ADDRESS: Harry Kats
7400 W. 183rd Street
Tinley Park, IL 60477

AGENCY WELL NO: 20643
WELL NAME & DESC: Well #3
TREATMENT APPLICATION POINT: 01
FACILITY NO. & NAME: 0317850 - W.A. Howe MHC
FACILITY PHONE CONTACT: 708-532-7000

LOCATION: TWP, RNG, SECTION, 10 ACRE PLOT: 36N, 12E, 36, 1G
DISTANCE FROM CORNER: 850S, 100W
QUAD SHEET CODE & NAME: 054D - Tinley Park
MIN. SETBACK: 200 feet
MAX. SETBACK:

SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: E- Uniform, relatively impermeable silty or clayey till at least 50 feet thick; no evidence of interbedded sand and gravel.
AGE OF WELL: 1951
WELL DEPTH: 515 feet
CASING DEPTH: 129 feet
AQUIFER CODE: 5656 - Shallow Bedrock
MULTPLE AQUIFER (Y,N): No
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is urban consisting of partly of moderate density residential housing and partly of commerical/industrial businesses.

INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO:

APPENDIX B3 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 3 (IEPA #20643)

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN

WELL NO. - MAP CODE - CLASSF*: 20643-01
NAME & ADDRESS OF UNIT OWNER: W.A. Howe MHC, 7400 W. 183rd Street, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Steam Plant
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2200 feet southwest of the well

WELL NO. - MAP CODE - CLASSF*: 20643-02
NAME & ADDRESS OF UNIT OWNER: W.A. Howe MHC, 7400 W. 183rd Street, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Water Treatment Plant
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2200 feet southwest of the well

WELL NO. - MAP CODE - CLASSF*: 20643-03
NAME & ADDRESS OF UNIT OWNER: Apartments, W. 183rd Street, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Apartment Complex
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1275 feet southwest of the well

WELL NO. - MAP CODE - CLASSF*: 20643-04
NAME & ADDRESS OF UNIT OWNER: Brusky Products, 7447 Duvan Dr., Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Brushes, Brooms, and Mops
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1600 feet west of the well

WELL NO. - MAP CODE - CLASSF*: 20643-05
NAME & ADDRESS OF UNIT OWNER: Airys Inc., Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Contractors
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1850 feet west of the well

APPENDIX B3 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 3 (IEPA #20643)

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 20643-06
NAME & ADDRESS OF UNIT OWNER: Empty Building, Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2200 feet west of the well

WELL NO. - MAP CODE - CLASSF*: 20643-07
NAME & ADDRESS OF UNIT OWNER: WLI Werneke-Long Inc., 7450 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Printing Ink
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 1900 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20643-08
NAME & ADDRESS OF UNIT OWNER: Adco Services Inc., 17650 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2300 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20643-09
NAME & ADDRESS OF UNIT OWNER: Peoria Mfg. Inc., 17620 Duven Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: General Machining Job Shop
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2300 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20643-10
NAME & ADDRESS OF UNIT OWNER: Tinley Auto Repair, 17600 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Auto Repair
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 2300 feet northwest of the well

APPENDIX B3 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 3 (IEPA #20643)

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 20643-21
NAME & ADDRESS OF UNIT OWNER: Eur-Am Auto and RV Rebuilders, 7300 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Auto and RV Rebuilder
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 850 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20643-22
NAME & ADDRESS OF UNIT OWNER: Pico Chemical Corp., 7319 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Industrial Metalworking Chemicals
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 900 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20643-23
NAME & ADDRESS OF UNIT OWNER: unknown, Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: unknown
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 800 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20643-24
NAME & ADDRESS OF UNIT OWNER: Service Master, Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Commerical Cleaning Products
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 700 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20643-25
NAME & ADDRESS OF UNIT OWNER: Herman's Auto Service, 7305 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Auto Repair
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 600 feet northwest of the well

APPENDIX B3 - INVENTORY & SYNOPSIS OF UNIT(S) W.A. Howe MHC Well No. 3 (IEPA #20643)

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDARY	OS = POTENTIAL SECONDARY
RI = ROUTE	OR = ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 20643-26
NAME & ADDRESS OF UNIT OWNER: The Healthy Attitude Ltd., 17500 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Health Club
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 800 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20643-27
NAME & ADDRESS OF UNIT OWNER: Chris Kane/MAACO/Frame Tech/Hand Car Wash, 7233 Duvan Drive, Tinely Park, IL 60477
DESCRIPTION AND COMMENTS: Auto Repair/Frame Shop/Car Wash.
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 350 feet northwest of the well

WELL NO. - MAP CODE - CLASSF*: 20643-28
NAME & ADDRESS OF UNIT OWNER: Mr. G's Furnityre, 17500 Duvan Drive, Tinley Park, IL 60477
DESCRIPTION AND COMMENTS: Furniture Store
PRE OR POST (Y,N): Yes
DISTANCE AND DIRECTION: 575 feet north of the well

APPENDIX C

APPENDIX E

FACILITY: 0317850 W A HOWE MHC *** CONTINUED ***

0000001	020	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	5.000	<	
0000001	021	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	5.000	<	5000.000
0000001	022	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP	434.000		1000.000
0000001	023	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	5.000	<	50.000
0000001	024	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	10.000		150.000
0000001	025	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	5.000	<	
0000001	026	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	3.000	<	50.000
0000001	027	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	638.000		
0000001	028	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	5.000	<	
0000001	029	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	50.000	<	5000.000
0000001	030	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	50.000	<	
0000001	031	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	1.000		10.000
0000001	032	32730	PHENOLS, TOTAL RECOVERABLE UG/L	0.010	<	
0000001	033	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	652.000		
0000001	034	71900	MERCURY,TOTAL UG/L AS HG	0.390		2.000
0000001	035	00059	FLOW (PUMPING) RATE GAL/MIN	1050.000		
0000001	036	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN	75.000		
0000001	037	90410		364.000		

SAMPLE NO: Z002959 LOCATION: WELL COLL DATE: 11/20/85 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: V-VOC OBSRVATNS: SMPL PERIOD: 11/85 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	32101	BROMODICHLOROMETHANE UG/L CG/MS		1.000	<			
0000001	002	32102	CARBON TETRACHLORIDE UG/L CG/MS		1.000	<	5.000		
0000001	003	32103	1,2-DICHLOROETHANE UG/L		1.000	<	5.000		
0000001	004	32104	BROMOFORM UG/L CG/MS		1.000	<			
0000001	005	32105	DIBROMOCHLOROMETHANE UG/L GC/MS		1.000	<			
0000001	006	32106	CHLOROFORM UG/L GC/MS		1.000	<			
0000001	007	34010	TOLUENE UG/L		1.000	<	1000.000		
0000001	008	34030	BENZENE UG/L		1.000	<	5.000		
0000001	009	34301	CHLOROBENZENE UG/L		1.000	<	100.000		
0000001	010	34371	ETHYLBENZENE UG/L		1.000	<	700.000		
0000001	011	34423	METHYLENE CHLORIDE UG/L		1.000	<	5.000		
0000001	012	34475	TETRACHLOROETHYLENE UG/L GC/MS		1.000	<	5.000		
0000001	013	34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000	<			
0000001	014	34501	1,1-DICHLOROETHYLENE UG/L GC/MS		1.000	<	7.000		
0000001	015	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS		1.000	<	200.000		
0000001	016	39180	TRICHLOROETHYLENE UG/L		1.000	<	5.000		
0000001	017	00059	FLOW (PUMPING) RATE GAL/MIN		1050.000				
0000001	018	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN		75.000				
0000001	019	90410			364.000				

FACILITY: 0317850 W A HOWE MHC *** CONTINUED ***

431A	00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	1.000	<	
431A	00	004	32104	BROMOFORM UG/L GC/MS	UG/L	1.000	<	
431A	00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000	<	5.000
431A	00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000	<	7.000
431A	00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000	<	
431A	00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000	<	100.000
431A	00	009	77279	1,2-DICHLORDETHANE UG/L	UG/L	1.000	<	5.000
431A	00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000	<	200.000
431A	00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000	<	5.000
431A	00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000	<	5.000
431A	00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	1.000	<	5.000
431A	00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000	<	100.000
431A	00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000	<	
431A	00	016	78124	BENZENE UG/L	UG/L	1.000	<	5.000
431A	00	017	78131	TOLUENE UG/L	UG/L	1.000	<	1000.000
431A	00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000	<	700.000
431A	00	019	81551	XYLENE UG/L	UG/L	1.000	<	10000.000
5001200		001	72037	PUMPING RATE GPM	GAL/M	440.000		

FACILITY: 0317850 W A HOWE MHC STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: 01 WELLS 1 2&3 DISCH TO TREATMENT PLANT STATUS: A
RAW SRCE: 20642 M2 NE END OF MHC OFF OF HARLEM AVE STATUS: A

SAMPLE NO: Z002960 LOCATION: WELL COLL DATE: 11/20/85 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 11/85 FUND CODE:

ANALYSIS ID	RSLT ND	STORET ND	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.160			
0000001	002	00630	NITRATE & NITRITE TOTAL MG/L AS N		0.100 <	10.000		
0000001	003	00665	PHOSPHORUS, TOTAL MG/L AS P		0.010 <			
0000001	004	00720	CYANIDE,TOTAL MG/L AS CN		0.010 <	0.200		
0000001	005	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		123.000			
0000001	006	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		62.000			
0000001	007	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		17.000			
0000001	008	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		4.900			
0000001	009	00940	CHLORIDE,TOTAL MG/L AS CL		5.000			
0000001	010	00945	SULFATE,TOTAL MG/L AS SO4		171.000			
0000001	011	00951	FLUORIDE,TOTAL MG/L AS F		0.380	4.000		
0000001	012	00956	SILICA,TOTAL MG/L AS SIO2		11.000			
0000001	013	00956	SILICA,TOTAL MG/L AS SIO2		11.000			
0000001	014	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		1.000 <	50.000		
0000001	015	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		43.000	1000.000		
0000001	016	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		0.500 <			
0000001	017	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		290.000			
0000001	018	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		3.000 <	10.000		
0000001	019	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB		5.000 <	50.000		

FACILITY: 0317850 W A HOWE MHC *** CONTINUED ***

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
102T000	001	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	MG/L	1170.000				
103T000	001	00410	ALKALINITY,TOTAL MG/L AS CACO3	MG/L	309.000				
107T000	001	00951	FLUORIDE,TOTAL MG/L AS F	MG/L	0.560		4.000		
108T000	001	00940	CHLORIDE,TOTAL MG/L AS CL	MG/L	1.100				
109T000	001	00945	SULFATE,TOTAL MG/L AS SO4	MG/L	591.000				
110T000	001	00630	NITRATE & NITRITE TOTAL MG/L AS N	MG/L	0.100	<	10.000		
111T000	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N	MG/L	0.650				
112T000	001	32730	PHENOLS, TOTAL RECOVERABLE UG/L	UG/L	5.000	<			
114T000	001	00956	SILICA,TOTAL MG/L AS SIO2	MG/L	13.000				
115T000	001	00665	PHOSPHORUS, TOTAL MG/L AS P	MG/L	0.010	<			
116T000	001	00720	CYANIDE,TOTAL MG/L AS CN	MG/L	0.005	<	0.200		
144T000	001	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS	UG/L	3.000		50.000		
151T100	001	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	UG/L	5.000	<	50.000		
153T000	001	71900	MERCURY,TOTAL UG/L AS HG	UG/L	0.050	<	2.000		
155T000	001	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	UG/L	1.000	<	10.000		
177T100	001	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	202.000				
177T100	002	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	68.000				
177T100	003	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP	MG/L	37.000				
177T100	004	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP	MG/L	8.400				
177T100	005	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	UG/L	68.000				
177T100	006	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP	UG/L	12.000		1000.000		
177T100	007	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	UG/L	843.000				
177T100	008	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP	UG/L	2.000	<			
177T100	009	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB	UG/L	3.000	<	10.000		
177T100	010	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB	UG/L	5.000	<	50.000		
177T100	011	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	UG/L	13.000		5000.000		
177T100	012	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	UG/L	5.000	<			
177T100	013	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP	UG/L	2083.000		1000.000*		
177T100	014	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	UG/L	17.000		150.000		
177T100	015	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	UG/L	5.000	<			
177T100	016	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	UG/L	3.000	<	50.000		
177T100	017	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	UG/L	2170.000				
177T100	018	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	UG/L	5.000	<			
177T100	019	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	UG/L	50.000	<	5000.000		
177T100	020	82394	HARDNESS, CALC - MG/L	MG/L	784.000				
530F000	001	72037	PUMPING RATE GPM	GAL/M	440.000				

SAMPLE NO: 076046900 LOCATION: TINLEY PARK MHC/WELL 1 COLL DATE: 10/30/87 DELIVERED BY: CMS
SMPL TYPE: RAW COLLECTOR: MARTINEZ LAB RCVD: 11/03/87 RECEIVED BY: D V
SMPL PURP: 5-SPEC/OTHR COMMENTS: VOC'S LAB COMPL: 12/30/87 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 10/87 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431A 00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000	<			
431A 00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000	<			

FACILITY: 0317850 W A HOWE MHC *** CONTINUED ***

SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 10/87 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00410	ALKALINITY,TOTAL MG/L AS CACO3		309.000				
		00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.650				
		00630	NITRATE & NITRITE TOTAL MG/L AS N		0.100	<	10.000		
		00665	PHOSPHORUS, TOTAL MG/L AS P		0.010	<			
		00720	CYANIDE,TOTAL MG/L AS CN		0.005	<	0.200		
		00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		202.000				
		00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		68.000				
		00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		37.000				
		00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		8.400				
		00940	CHLORIDE,TOTAL MG/L AS CL		1.100				
		00951	FLUORIDE,TOTAL MG/L AS F		0.560		4.000		
		00956	SILICA,TOTAL MG/L AS S102		0.010	<			
		01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		3.000		50.000		
		01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		12.000		1000.000		
		01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		2.000	<			
		01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		843.000				
		01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		3.000	<	10.000		
		01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB		5.000	<	50.000		
		01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000	<			
		01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		13.000		5000.000		
		01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		2083.000		1000.000*		
		01051	LEAO,TOTAL RECOVERABLE UG/L AS PB		5.000	<	50.000		
		01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		17.000		150.000		
		01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		5.000	<			
		01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		3.000	<	50.000		
		01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		2170.000				
		01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP		5.000	<			
		01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP		50.000	<	5000.000		
		01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP		68.000				
		01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE		1.000	<	10.000		
		32730	PHENOLS, TOTAL RECOVERABLE UG/L		13.000				
		70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L		1170.000				
		71900	MERCURY,TOTAL UG/L AS HG		0.050	<	2.000		
		72037	PUMPING RATE GPM		440.000				
		82394	HARDNESS, CALC - MG/L		784.000				

SAMPLE NO: B71769400 LOCATION: TINLEY PARK MHC WELL 18
SMPL TYPE: RAW COLLECTOR: MARTINEZ
SMPL PURP: 5-SPEC/OTHR COMMENTS:
SMPL PROG: I-GWM INORG OBSRVATNS:

COLL DATE: 10/30/87 DELIVERED BY: UPS
LAB RCVD: 11/03/87 RECEIVED BY: MAO
LAB COMPL: 12/28/87 LAB SUPERVISOR: RPF
SMPL PERIOD: 10/87 FUND CODE: PW30

FACILITY: 0317850 W A HOWE MHC STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: 01 WELLS 1 2&3 DISCH TO TREATMENT PLANT STATUS: A
RAW SRCE: 20641 W1 NEXT TO TRTMT PLANT INSIDE BRICK BLDG STATUS: I

SAMPLE NO: B71769300 LOCATION: TINLEY PARK MHC WELL 1 COLL DATE: 10/30/87 DELIVERED BY: UPS
SMPL TYPE: RAW COLLECTOR: MARTINEZ LAB RCVD: 11/03/87 RECEIVED BY: MAD
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 12/28/87 LAB SUPERVISOR: RPF
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 10/87 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
102T000	001	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	MG/L	749.000				
103T000	001	00410	ALKALINITY,TOTAL MG/L AS CACO3	MG/L	308.000				
107T000	001	00951	FLUORIDE,TOTAL MG/L AS F	MG/L	0.570		4.000		
108T000	001	00940	CHLORIDE,TOTAL MG/L AS CL	MG/L	1.000	<			
109T000	001	00945	SULFATE,TOTAL MG/L AS SO4	MG/L	588.000				
110T000	001	00630	NITRATE & NITRITE TOTAL MG/L AS N	MG/L	0.100	<	10.000		
111T000	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N	MG/L	0.640				
112T000	001	32730	PHENOLS, TOTAL RECOVERABLE UG/L	UG/L	5.000	<			
114T000	001	00956	SILICA,TOTAL MG/L AS SIO2	MG/L	13.000				
115T000	001	00665	PHOSPHORUS, TOTAL MG/L AS P	MG/L	0.010	<			
116T000	001	00720	CYANIDE,TOTAL MG/L AS CN	MG/L	0.005	<	0.200		
144T000	001	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS	UG/L	3.000		50.000		
151T100	001	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	UG/L	5.000	<	50.000		
153T000	001	71900	MERCURY,TOTAL UG/L AS HG	UG/L	0.050	<	2.000		
155T000	001	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	UG/L	1.000	<	10.000		
177T100	001	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	202.000				
177T100	002	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	67.000				
177T100	003	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP	MG/L	37.000				
177T100	004	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP	MG/L	8.300				
177T100	005	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	UG/L	54.000				
177T100	006	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP	UG/L	12.000		1000.000		
177T100	007	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	UG/L	817.000				
177T100	008	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP	UG/L	2.000	<			
177T100	009	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB	UG/L	3.000	<	10.000		
177T100	010	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB	UG/L	5.000	<	50.000		
177T100	011	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	UG/L	15.000		5000.000		
177T100	012	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	UG/L	5.000	<			
177T100	013	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP	UG/L	2306.000		1000.000*		
177T100	014	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	UG/L	19.000		150.000		
177T100	015	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	UG/L	5.000	<			
177T100	016	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	UG/L	3.000	<	50.000		
177T100	017	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	UG/L	2167.000				
177T100	018	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	UG/L	5.000	<			
177T100	019	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	UG/L	50.000	<	5000.000		
177T100	020	82394	HARDNESS, CALC - MG/L	MG/L	781.000				
530F000	001	72037	PUMPING RATE GPM	GAL/M	440.000				

SAMPLE NO: B717694 LOCATION: TINLEY PK MHC WELL 1 COLL DATE: 10/30/87 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: MARTINEZ LAB RCVD: 11/03/87 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: LAB SUPERVISOR:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF PUBLIC WATER SUPPLIES
SELECTED SAMPLE EXPANDED REPORT

FACILITY: 0317850 W A HOWE MHC STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: STATUS:
RAW SRCE: STATUS:

SAMPLE NO: 821276500 LOCATION: WA HOWE MHC COLL DATE: 08/20/92 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: KEN D LAB RCVD: 08/21/92 RECEIVED BY: PMD
SMPL PURP: 3-REPLACE COMMENTS: LAB COMPL: 11/18/92 LAB SUPERVISOR: RPF
SMPL PROG: C-CHEMICAL OBSRVATNS: SMPL PERIOD: 08/92 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
100T000	001	00403	PH LABORATORY UNITS	UNITS	7.400				
101T000	001	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C	UM/CM	1408.000				
102T000	001	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	MG/L	849.000				
103T000	001	00410	ALKALINITY,TOTAL MG/L AS CACO3	MG/L	276.000				
105T000	001	00900	HARDNESS,EDTA MG/L AS CACO3	MG/L	817.000				
107T000	001	00951	FLUORIDE,TOTAL MG/L AS F	MG/L	0.480		4.000		
108T000	001	00940	CHLORIDE,TOTAL MG/L AS CL	MG/L	1.400				
109T000	001	00945	SULFATE,TOTAL MG/L AS SO4	MG/L	560.000				
110T000	001	00630	NITRATE & NITRITE TOTAL MG/L AS N	MG/L	0.020		10.000		
111T000	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N	MG/L	0.700				
114T000	001	00956	SILICA,TOTAL MG/L AS SIO2	MG/L	15.300				
116T000	001	00720	CYANIDE,TOTAL MG/L AS CN	MG/L	0.010	<	0.200		
144T000	001	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS	UG/L	2.500		50.000		
151T100	001	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	UG/L	5.000	<	50.000		
153T000	001	71900	MERCURY,TOTAL UG/L AS HG	UG/L	0.050	<	2.000		
155T000	001	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	UG/L	1.000	<	10.000		
177T100	001	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	229.000				
177T100	002	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	MG/L	56.300				
177T100	003	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP	MG/L	25.900				
177T100	004	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP	MG/L	4.900				
177T100	005	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	UG/L	150.000	<			
177T100	006	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP	UG/L	6.000		1000.000		
177T100	007	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	UG/L	813.000				
177T100	008	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP	UG/L	1.000	<			
177T100	009	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB	UG/L	5.000	<	10.000		
177T100	010	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB	UG/L	5.000	<	50.000		
177T100	011	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	UG/L	20.000		5000.000		
177T100	012	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	UG/L	5.000	<			
177T100	013	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP	UG/L	2900.000		1000.000*		
177T100	014	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	UG/L	22.000		150.000		
177T100	015	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	UG/L	15.000	<			
177T100	016	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	UG/L	5.000	<	50.000		
177T100	017	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	UG/L	2000.000				
177T100	018	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	UG/L	5.000	<			
177T100	019	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	UG/L	59.000		5000.000		
177T100	020	82394	HARDNESS, CALC - MG/L	MG/L	803.000				

APPENDIX D

FACILITY: 0317850 W A HOWE MHC (CONTINUED)

SUSCEPTIBILITY CODES

LAND BURIAL: E = UNIFORM, RELATIVELY IMPERMEABLE SILTY OR CLAYEY TILL AT LEAST 50 FT THICK; NO EVIDENCE OF INTERBEDDED SAND AND GRAVEL.

*NOTE: INACTIVE WELLS SHOULD EITHER BE RETROFITTED FOR USE OR PROPERLY ABANDONED. INACTIVE WELLS WHICH ARE IMPROPERLY ABANDONED ARE CONSIDERED POTENTIAL ROUTES ACCORDING TO P.A. 85-0863.

FACILITY: 0317850 W A HOWE MHC

---------- OWNER ---------- ---------- OFFICIAL CUSTODIAN ----------

HARRY KATS

7400 W 183RD ST

TINLEY PARK IL 60477

WELL: 20641 W1 NEXT TO TRTMT PLANT INSIDE BRICK BLDG STATUS: INACTIVE* BACKUP DRILLED DEPTH(FT): 491
LATITUDE: N41 34 02.0 LONGITUDE: W087 48 01.0 TWP: 36N RNG: 12E SEC: 36 PLOT: 3F

SUSCEPTIBILITY - LAND BURIAL: E SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 200* ---
ALTITUDE (FT): 0.00 ALTITUDE METHOD CODE: - UNKNOWN
INTERVAL 1 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
INTERVAL 2 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
INTERVAL 3 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
AQUIFERS: SILURIAN DOLOMITE SILURIAN SYSTEM
NIAGARAN SERIES ALEXANDRIAN SERIES
MAQUOKETA GROUP

WELL: 20642 W2 NE END OF MHC OFF OF HARLEM AVE STATUS: ACTIVE DRILLED DEPTH(FT): 489
LATITUDE: N41 34 08.0 LONGITUDE: W087 47 40.0 TWP: 36N RNG: 12E SEC: 36 PLOT: 1G

SUSCEPTIBILITY - LAND BURIAL: E SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0200 ---
ALTITUDE (FT): 0.00 ALTITUDE METHOD CODE: - UNKNOWN
INTERVAL 1 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
INTERVAL 2 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
INTERVAL 3 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
AQUIFERS: SILURIAN DOLOMITE SILURIAN SYSTEM
NIAGARAN SERIES ALEXANDRIAN SERIES
MAQUOKETA GROUP

WELL: 20643 W3 NE END OF MHC OFF HARLEM 200FT N W2 STATUS: ACTIVE DRILLED DEPTH(FT): 515
LATITUDE: N41 34 09.0 LONGITUDE: W087 47 40.0 TWP: 36N RNG: 12E SEC: 36 PLOT: 1G

SUSCEPTIBILITY - LAND BURIAL: E SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0200 ---
ALTITUDE (FT): 0.00 ALTITUDE METHOD CODE: - UNKNOWN
INTERVAL 1 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
INTERVAL 2 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
INTERVAL 3 - TYPE: 0 - N/A SCREEN MATL: 0 - NOT APPLICABLE DEPTH TO TOP (FT): 0.00 DEPTH TO BOT (FT): 0.00
AQUIFERS: SILURIAN DOLOMITE SILURIAN SYSTEM
NIAGARAN SERIES ALEXANDRIAN SERIES
MAQUOKETA GROUP

W. A. Howe MHC-0317850
#1-20641

(40000—[illegible]—2-53)

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ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Dirt	72	0	72
Gravel sand and mud	26	72	98
Broken lime	7	98	105
Lime (water at 110')	330	105	435
Shale broke	1	435	436
Lime	21	436	457
Shale broke	1	457	458
Lime	7	458	465
Shale	26	465	491
			TD

Size of well: 19" surface to 98'.
20" to 121'
26" to 105'.

COMPANY	J. P. Miller Art. Well Co. NO.
FARM	Tinley Park St. Hospital NO. X
DATE DRILLED	COUNTY NO.
AUTHORITY	J. P. Miller Art. Well Company
ELEVATION	1900'S, 1800'W, NE/C
LOCATION	~~1830' N. line, 1750' E. line, EX cor.~~ 36-[illegible]-12E
COUNTY	COOK

correction per RTS 4/80

P-29907

Copie: (over) Now called Tinley Park Mental Health Center per EPA 10/80

STATE HOSPITAL WELL No. X Initial well

This well fitted in

correction per RTS-4/80

City Tinley Park County Cook Co.

Section 36 Twp. No. 36N Range 12E

Location (in feet from section corner) Approx. ~~1850~~ 1900'S. & ~~1980~~ 1800'W. of NE corner

Owner State Dept. of Welfare Authority

~~Contractor~~ Driller: J.P. Miller Address Brookfield, Ill.

Date drilled 1950 Elev. above sea level top of well 710 ± Topo map

Depth 491 feet

Log water from Limestone

Were drill cuttings saved yes Where filed S.G.S (soon)

Size hole 26 If reduced, where and how much 26 inch 0-105', 25-inch 105-121', 19-inch 121-491'

Casing record 26-inch O.D. (+5'-105') 20-inch (+5'-121') cemented 117 bags

Distance to water when not pumping over Distance to water is

feet after pumping at G. P. M. for hours.

Reference point for above measurements 1½ feet above top of casings.

Type of pump test turbine Distance to ~~cylinder~~ Bowls 200'

Length of ~~cylinder~~ Bowls 4' - 25 tage 13¼" Length of suction pipe below ~~cylinder~~ Bowls None

Length stroke Speed

Hours used per day Type of power

Rating of motor Rating of pump in G. P. M.

Can following be measured: (1) Static water level yes

(2) Pumping level yes (3) Discharge yes

(4) Influence on other wells no

Temperature of water over Was water sample collected over

Date 10/31/50 & 11/1/50 Effect of water on meters, hot water coils, etc.

Date of Analysis Analysis No. 123469 & 123470

Recorder G.E.H

Date 11/2/50

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P-29907

Cook Co.

#1 W. A. Howe MHC-0317850
Well #2-20642

Page 1 ILLINOIS GEOLOGICAL SURVEY, URBANA

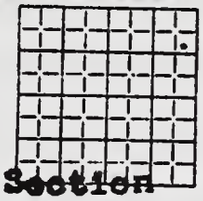
Strata	Thickness	Top	Bottom
Mud & filler		0	97
Brown lime		97	124
Broken lime & shale		124	152
Red rock		152	160
Lime gray		160	310
Shale		310	319
Lime gray		319	450
Shale		450	489
			TD

Casing: 102'3" of 36"
124'6" of 20"

Size of Well: 20"

Sample Set #21578

COMPANY J. P. Miller Artesian Well Co.
FARM Tinley Park State Hospital NO. #2
DATE DRILLED 1951 COUNTY NO.
AUTHORITY J. P. Miller Artesian Well Co.
ELEVATION ~~668'~~ 9 est. T. M.
LOCATION ~~1050'~~ 1050 N. line, ~~400'~~ 100 E. line of Section 31
COUNTY COOK T.36N-13E



Well Test. Tinley Park Park State Hospital - Well #2
Now called Tinley Park Mental Health Center per EPA 10/80

City Village of Tinley Park County Cook

Section 36 Twp. No. 36 Range 12

Location (in feet from section corner) 200' south of well #2 100' W. & 1050' S. of N.E. Co

Owner State of Illinois Authority

Contractor U.P. Miller Artesian Well Co Address Brookfield, Ill.

Date drilled June 1951 Elev. above sea level top of well 703 ±

Depth 489

Log Top soil and drift 0-102; Limestone 102-459
Shale 459-489

Were drill cuttings saved Yes Where filed State Geological Survey

Size hole 28" If reduced, where and how much from 102 to 489 - 20" hole

Casing record 102" of 28" O.D. from ground surface to 102. 20" O.D. pipe - Ground Surface To 124.

Distance to water when not pumping 12' Distance to water is 119'

Well cemented to 102'.

feet after pumping at 510 - 1700 G. P. M. for 24 hours.

Reference point for above measurements Top casing 3" above ground surface

Type of pump Peerless Turbine Distance to cylinder 204'

Length of cylinder Length of suction pipe below cylinder

Length stroke Speed

Hours used per day Test Pump Type of power Gasoline Engine

Rating of motor Rating of pump in G. P. M.

Can following be measured: (1) Static water level Direct measure [illegible]

(2) Pumping level Test pump will be removed (3) Discharge

(4) Influence on other wells #1 - pulled down 2'; #3 pulled down 10.6'
Village of Tinley Park well pulled down 31½'.

Temperature of water 52.4 Was water sample collected Yes

Date 7/3/51 Effect of water on meters, hot water coils, etc. No effect observed.

Date of Analysis Analysis No. 125770 Partial

Recorder J. S. Randall

W. A. Howe MHC-0317850
Well 2-20642

Date July 3, 1951

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C.C. over Now called Tinley Park Mental Health Center per EPA 10/80

Tinley Park State Hospital Well No. 3

City _____ County Cook Co.

Section 36 Twp. No. T. 36 N. Range R. 12 E.

Location (in feet from section corner) Approx 100' W. & 850' S. of N.E. Corner

Owner State of Illinois Authority _____

Contractor Drille J. P. Miller Artesian Well Co. Address Brookfield, Ill.

Date drilled Completed Jan - 1951 Elev. above sea level top of well 698' Topo map

Depth 515

Log Soil (0-3), Clay (3-40), Mud & Clay (40-43), Mud & Gravel (43-72), Sand & Gravel (72-98), Limestone (98-465), Shale (465-515)

Were drill cuttings saved yes Where filed soon in S.G.S.

Size hole 28" If reduced, where and how much Reduced to 19" @ 129' 19" to Bottom.

Casing record 26-inch O.D. 107½' top + 3' G.S. } Pressure grouted with cement to 129'
20-inch O.D. 129' top + 3' G.S. }

Distance to water when not pumping _____ Distance to water is _____

feet after pumping at over G. P. M. for _____ hours.

Reference point for above measurements top of casing

Type of pump test turbine Distance to cylinder _____

Length of cylinder _____ Length of suction pipe below cylinder _____

Length stroke _____ Speed _____

Hours used per day _____ Type of power Universal Drive off of Gasoline Engine

Rating of motor _____ Rating of pump in G. P. M. _____

Can following be measured: (1) Static water level _____

(2) Pumping level over (3) Discharge _____

(4) Influence on other wells total of 6' in Tinley Park Village Well total of 2½' in Tinley Park State Hospital Well No. 1

Temperature of water over Was water sample collected over

Date 1/29 & 30/51 Effect of water on meters, hot water coils, etc. _____

Date of Analysis _____ Analysis No. 124237 M+F

Recorder G.E.N.

W. A. Howe MHC-0317850

Well #3-20643

Date 2/1/51

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